501P1576

FIG. 1

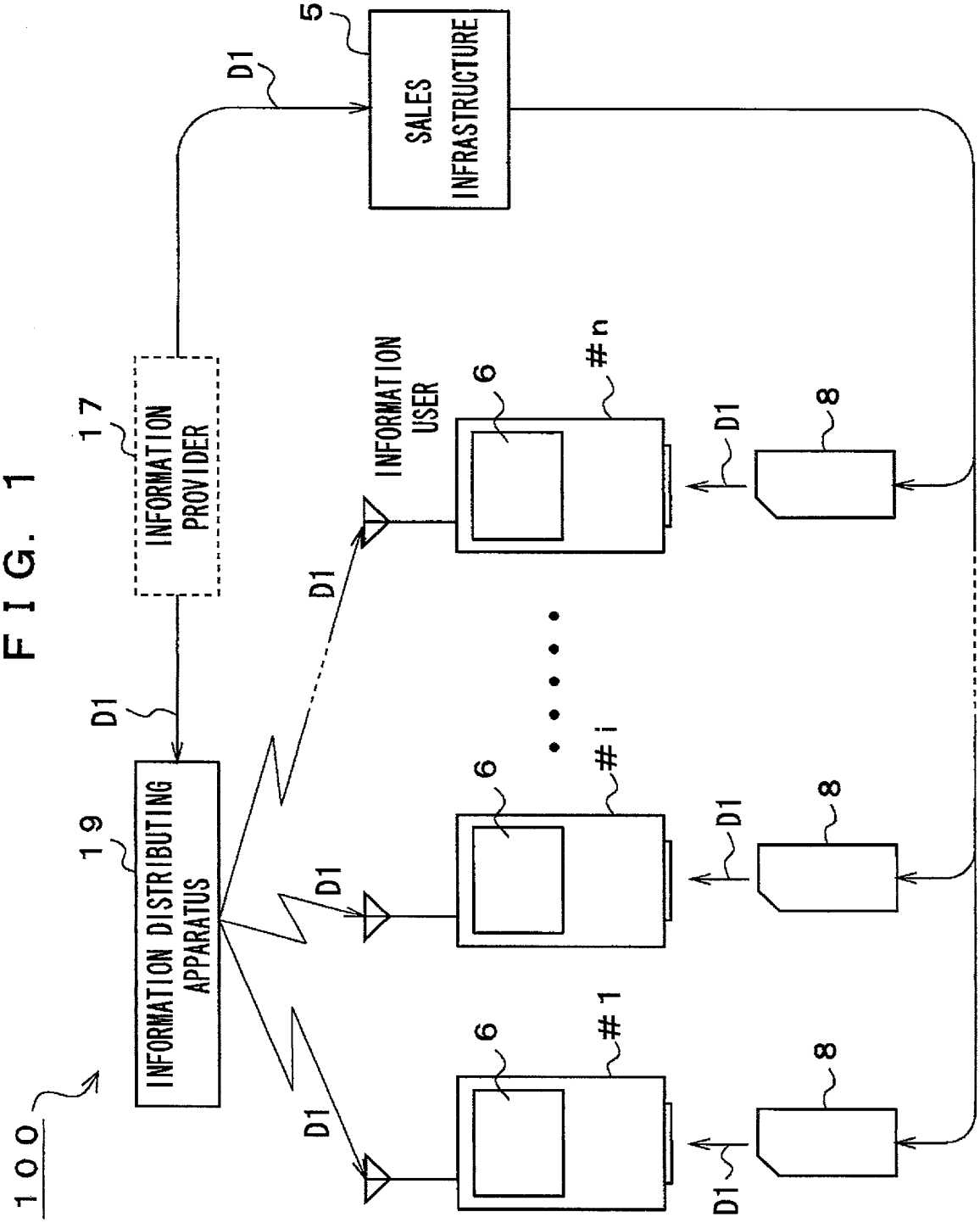
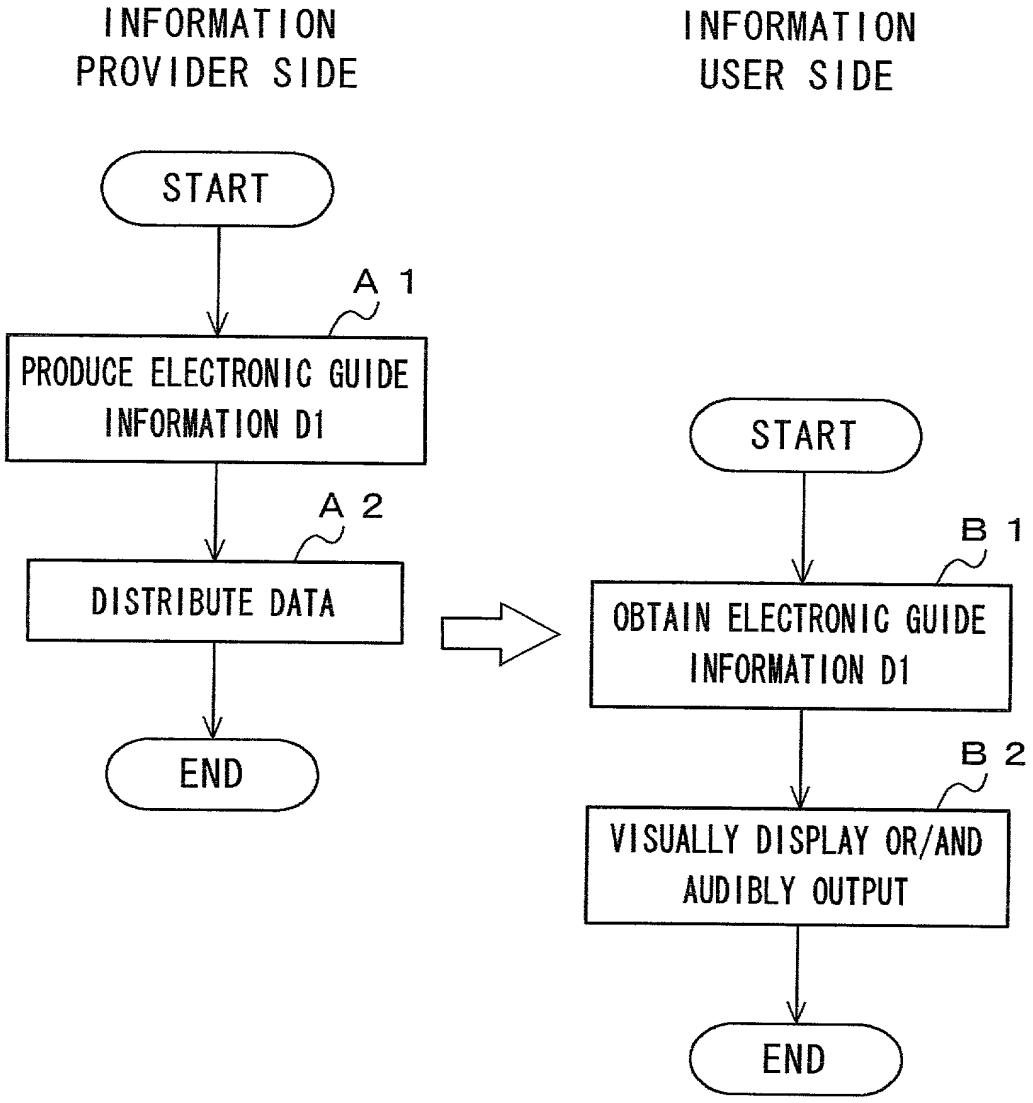
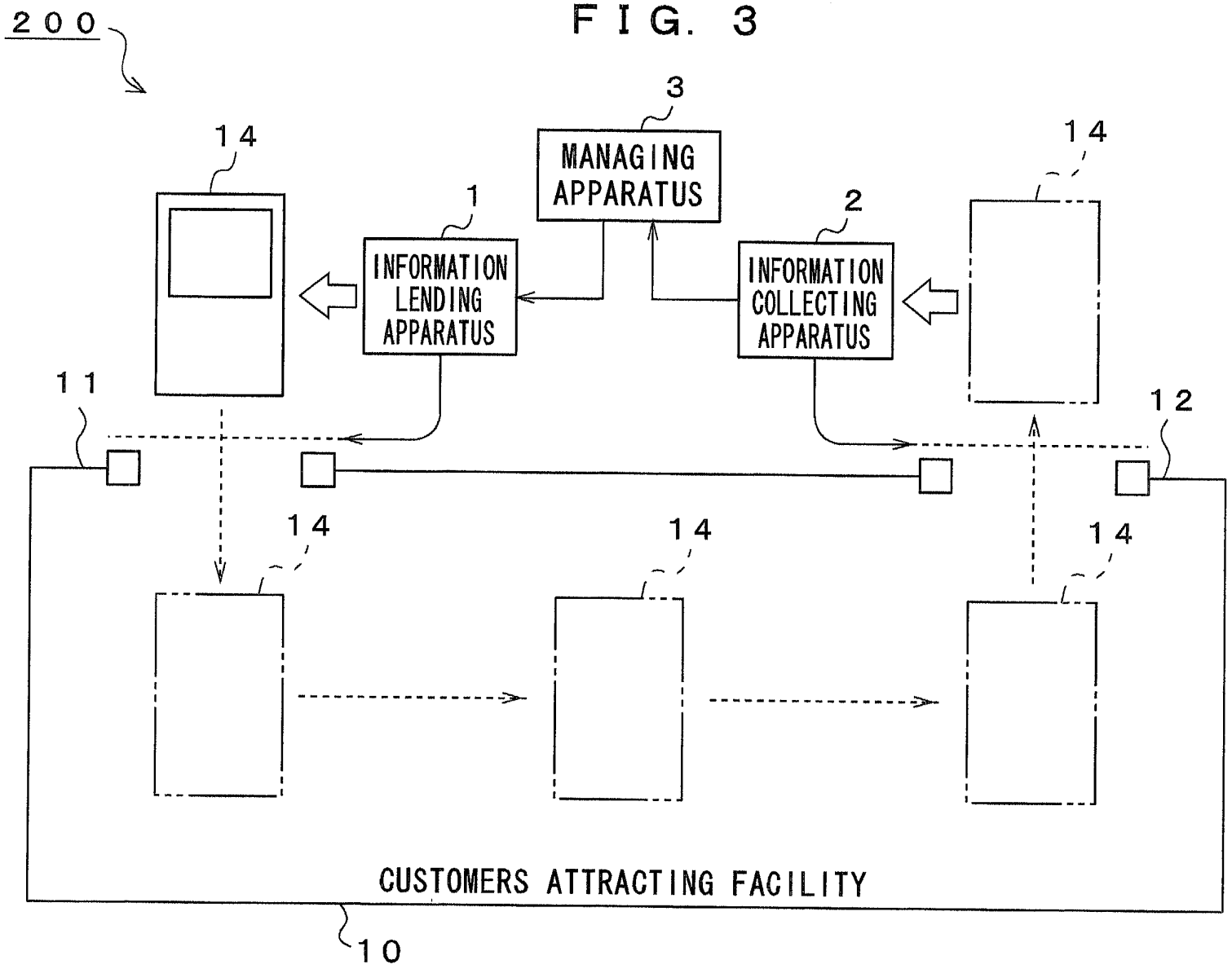


FIG. 2


INFORMATION PROVIDER SIDE
INFORMATION USER SIDE
START
A 1
PRODUCE ELECTRONIC GUIDE INFORMATION D1
A 2
DISTRIBUTE DATA
END
START
B 1
OBTAIN ELECTRONIC GUIDE INFORMATION D1
B 2
VISUALLY DISPLAY OR/AND AUDIBLY OUTPUT
END

Postal Service

FIG. 3



501p.576

FIG. 4

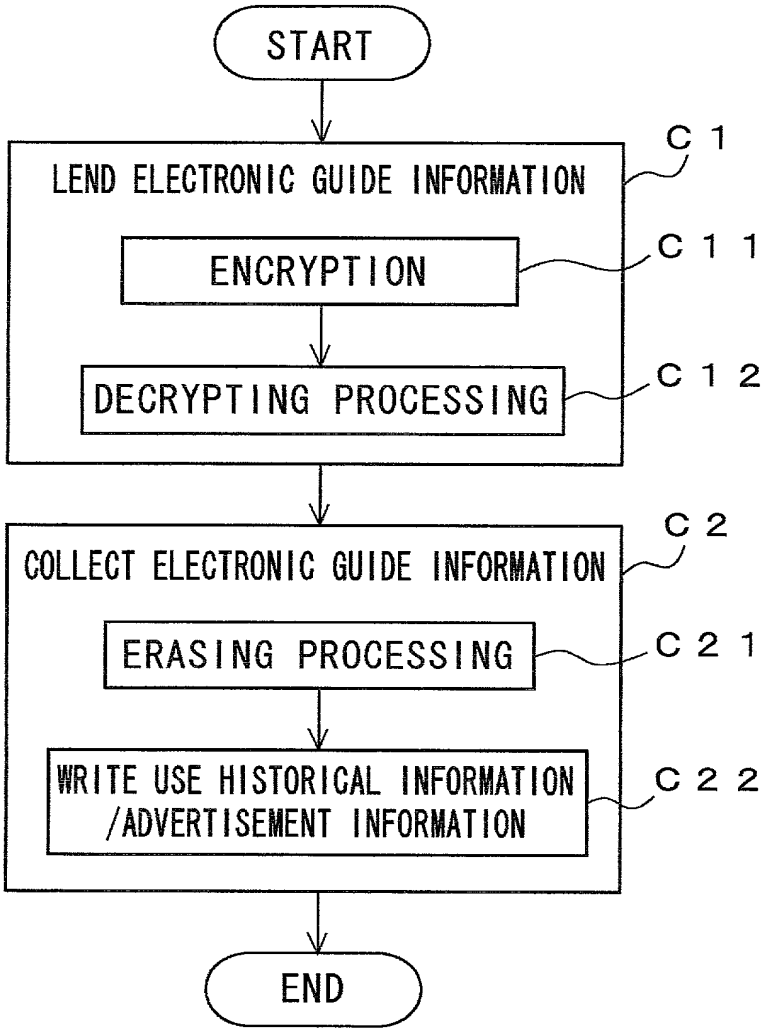


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FIG. 5

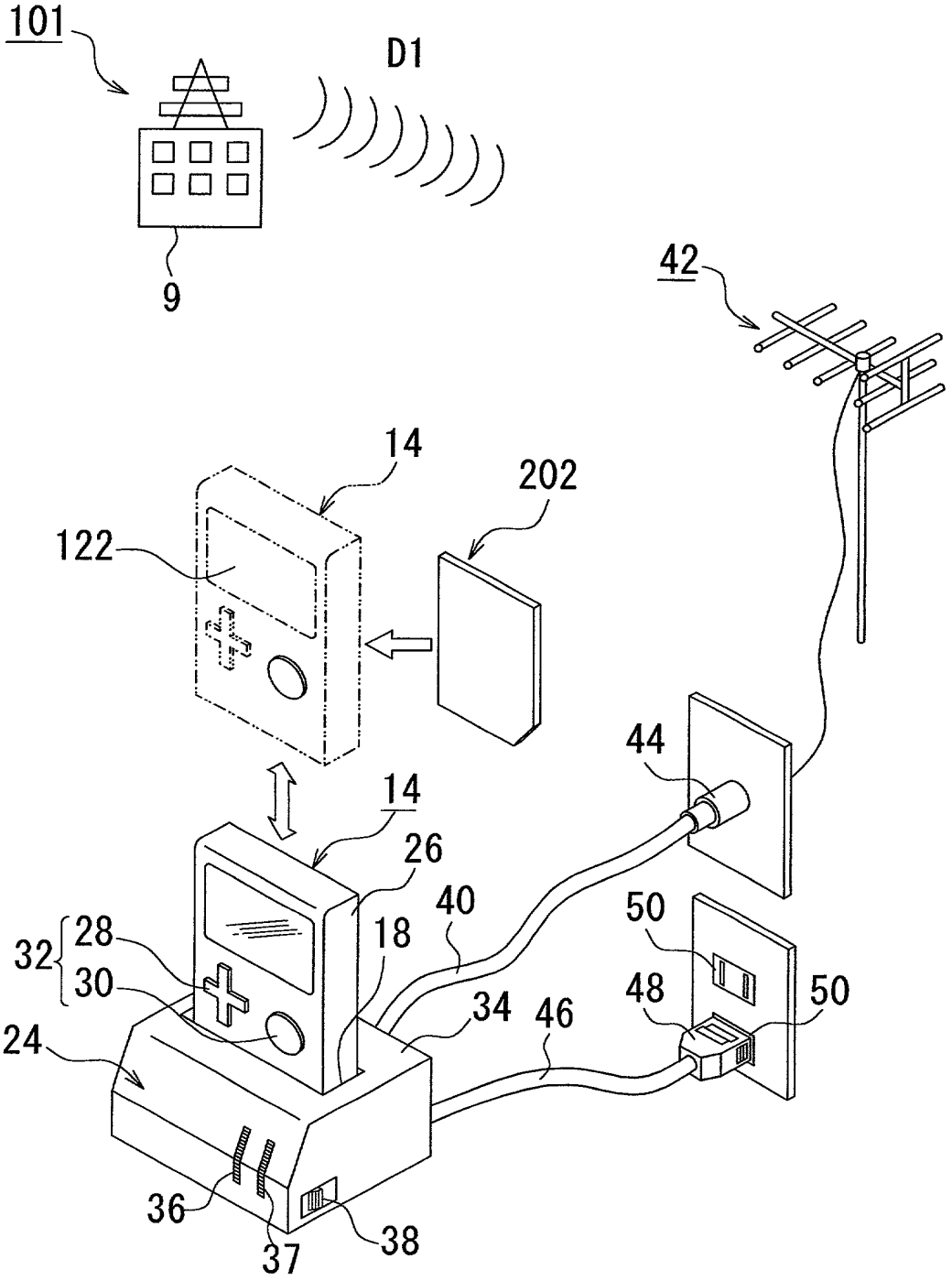
101
D1
9
42
14
202
122
44
14
26
40
50
32
28
18
30
48
50
34
46
24
36
37
38

FIG. 6

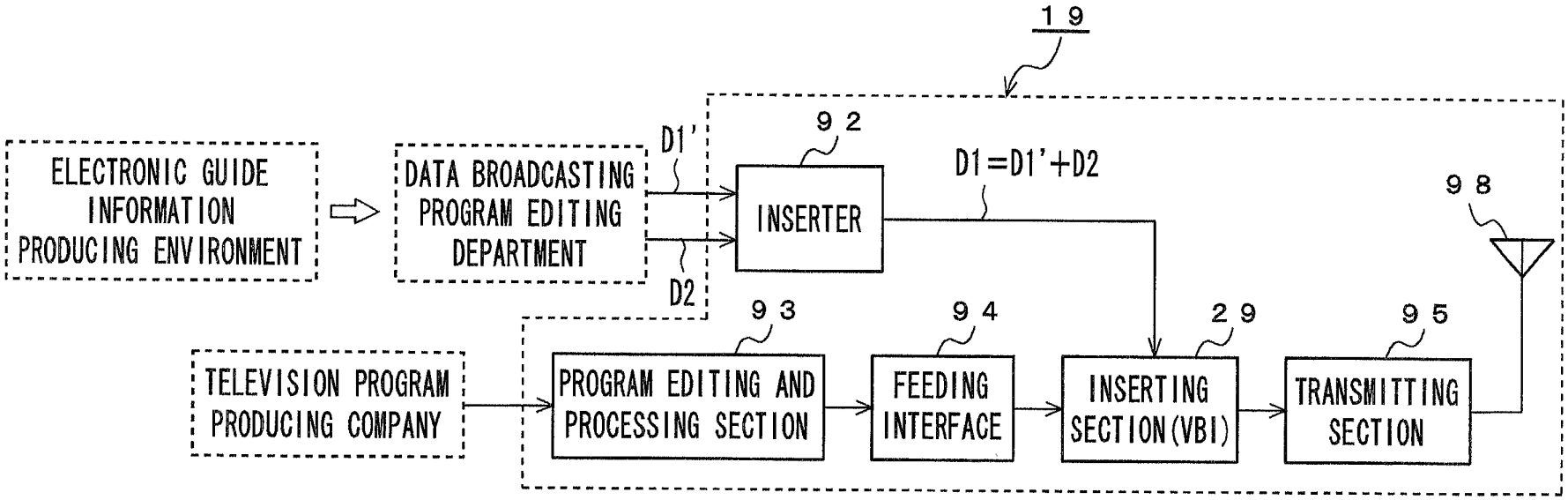
19
92
D1'
D1=D1'+D2
98
ELECTRONIC GUIDE INFORMATION PRODUCING ENVIRONMENT
DATA BROADCASTING PROGRAM EDITING DEPARTMENT
INSERTER
D2
93
94
29
95
TELEVISION PROGRAM PRODUCING COMPANY
PROGRAM EDITING AND PROCESSING SECTION
FEEDING INTERFACE
INSERTING SECTION(VBI)
TRANSMITTING SECTION

FIG. 7

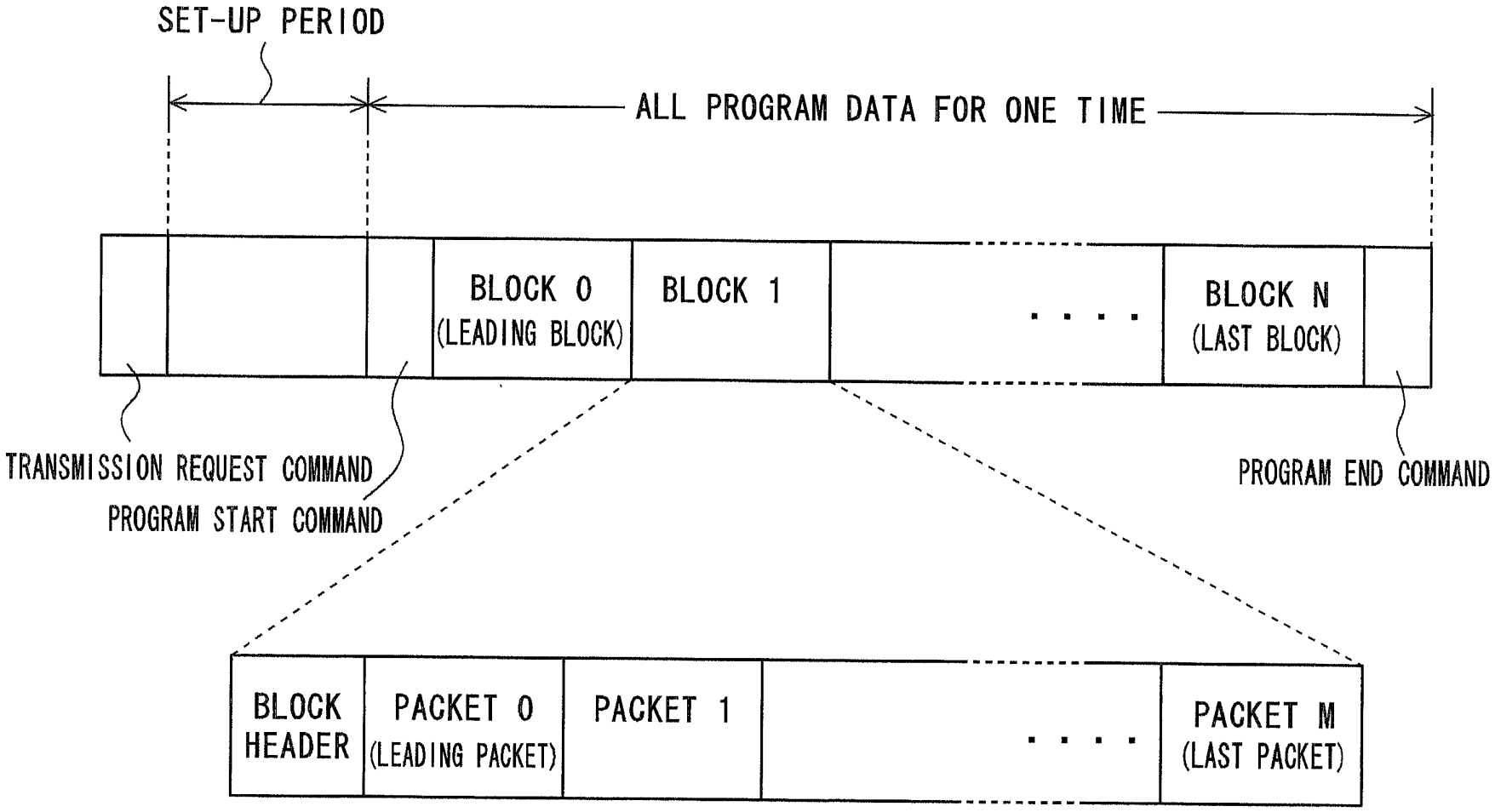
SET-UP PERIOD
ALL PROGRAM DATA FOR ONE TIME
BLOCK 0
(LEADING BLOCK)
BLOCK 1
. . . .
BLOCK N
(LAST BLOCK)
TRANSMISSION REQUEST COMMAND
PROGRAM START COMMAND
PROGRAM END COMMAND
BLOCK HEADER
PACKET 0
(LEADING PACKET)
PACKET 1
. . . .
PACKET M
(LAST PACKET)

FIG. 8

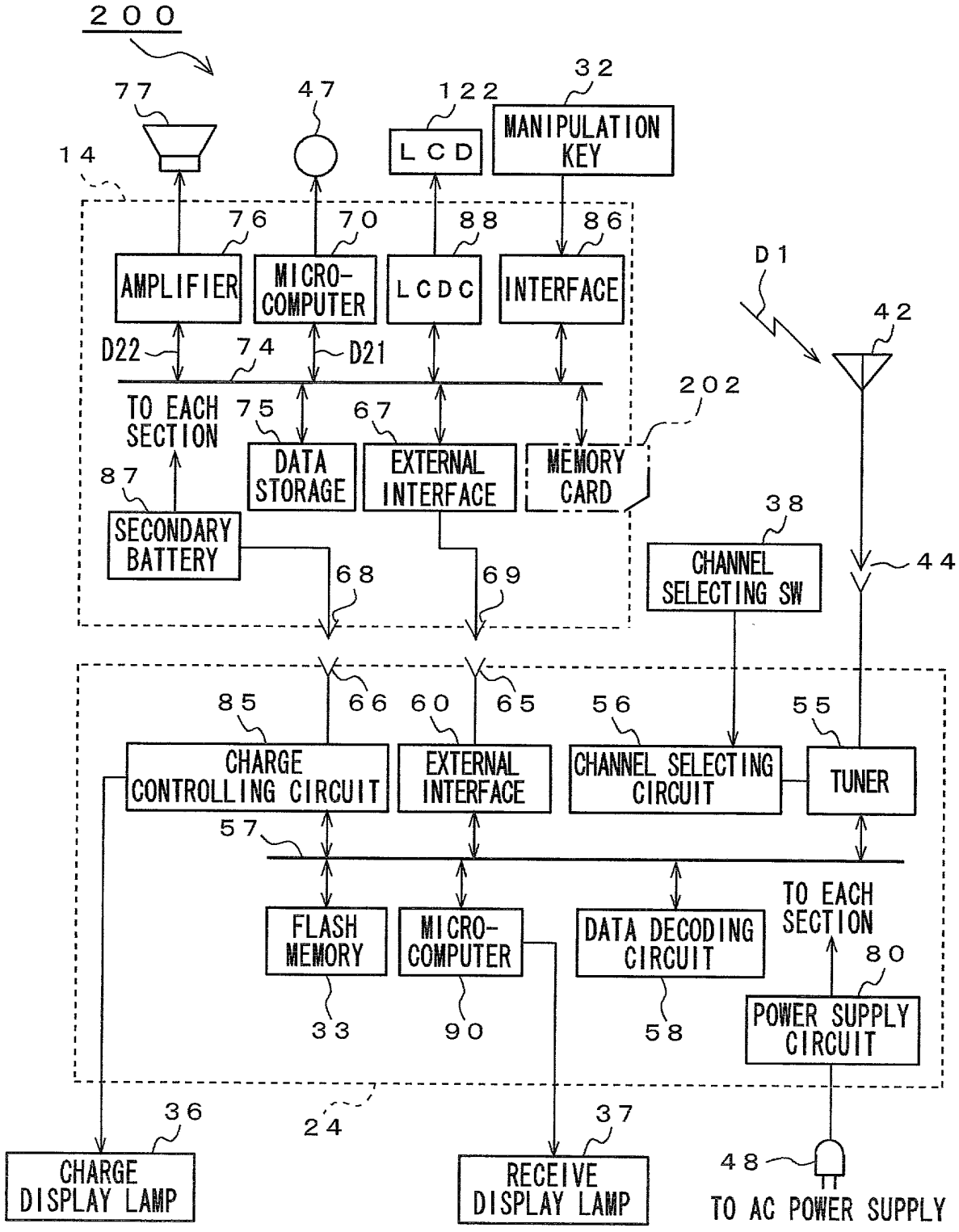
200
77
47
122
32
14
LCD
MANIPULATION KEY
76
70
88
86
AMPLIFIER
MICRO-COMPUTER
LCDC
INTERFACE
D1
42
D22
74
D21
202
TO EACH SECTION
75
67
DATA STORAGE
EXTERNAL INTERFACE
MEMORY CARD
87
38
SECONDARY BATTERY
CHANNEL SELECTING SW
44
68
69
66
65
85
60
56
55
CHARGE CONTROLLING CIRCUIT
EXTERNAL INTERFACE
CHANNEL SELECTING CIRCUIT
TUNER
57
TO EACH SECTION
FLASH MEMORY
MICRO-COMPUTER
DATA DECODING CIRCUIT
80
POWER SUPPLY CIRCUIT
33
90
58
24
36
37
48
CHARGE DISPLAY LAMP
RECEIVE DISPLAY LAMP
TO AC POWER SUPPLY

FIG. 9

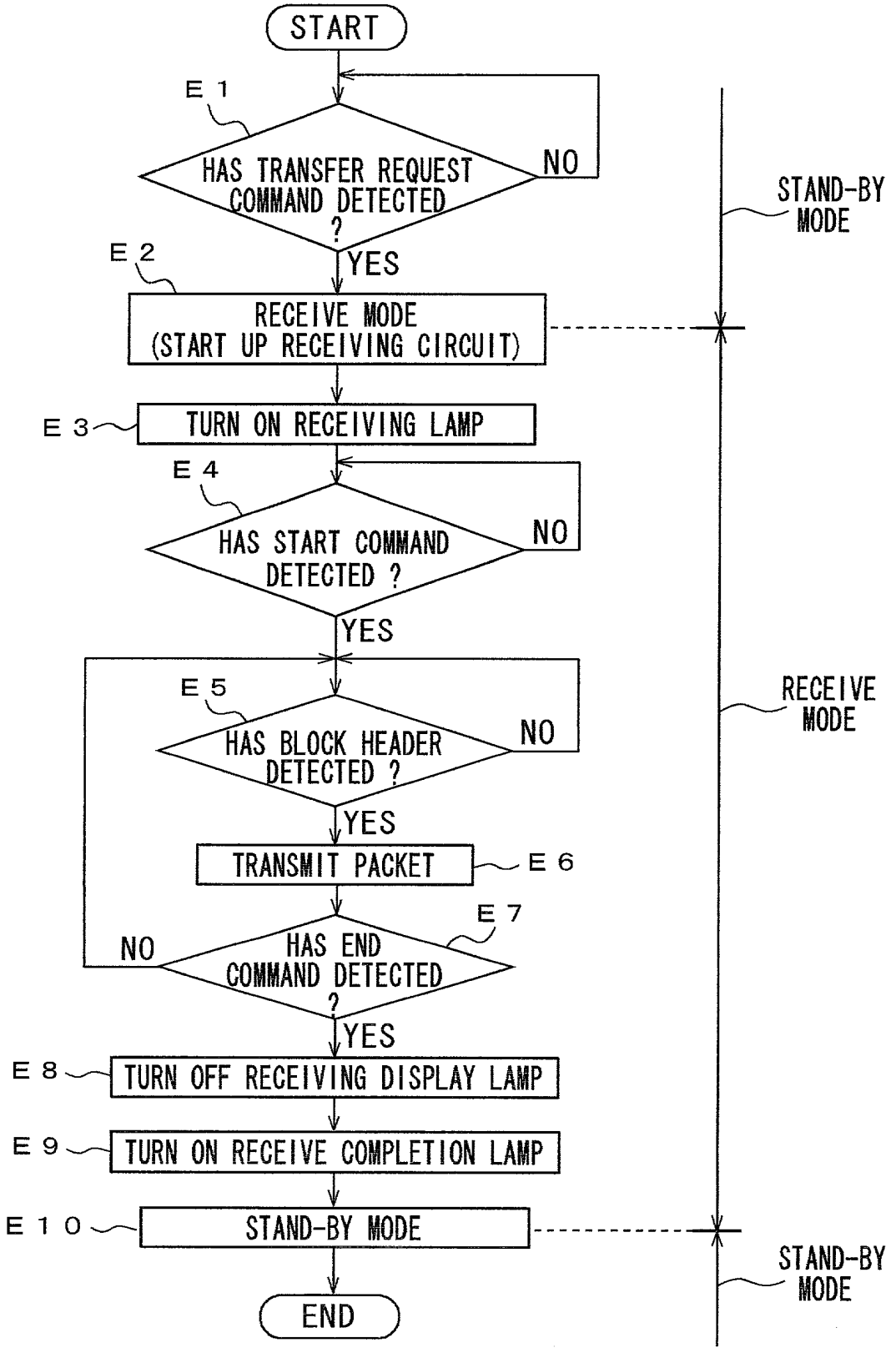
START
E 1
HAS TRANSFER REQUEST COMMAND DETECTED ?
NO
YES
E 2
RECEIVE MODE (START UP RECEIVING CIRCUIT)
E 3
TURN ON RECEIVING LAMP
E 4
HAS START COMMAND DETECTED ?
NO
YES
E 5
HAS BLOCK HEADER DETECTED ?
NO
YES
TRANSMIT PACKET
E 6
E 7
HAS END COMMAND DETECTED ?
NO
YES
E 8
TURN OFF RECEIVING DISPLAY LAMP
E 9
TURN ON RECEIVE COMPLETION LAMP
E 10
STAND-BY MODE
END
STAND-BY MODE
RECEIVE MODE
STAND-BY MODE

FIG. 10A

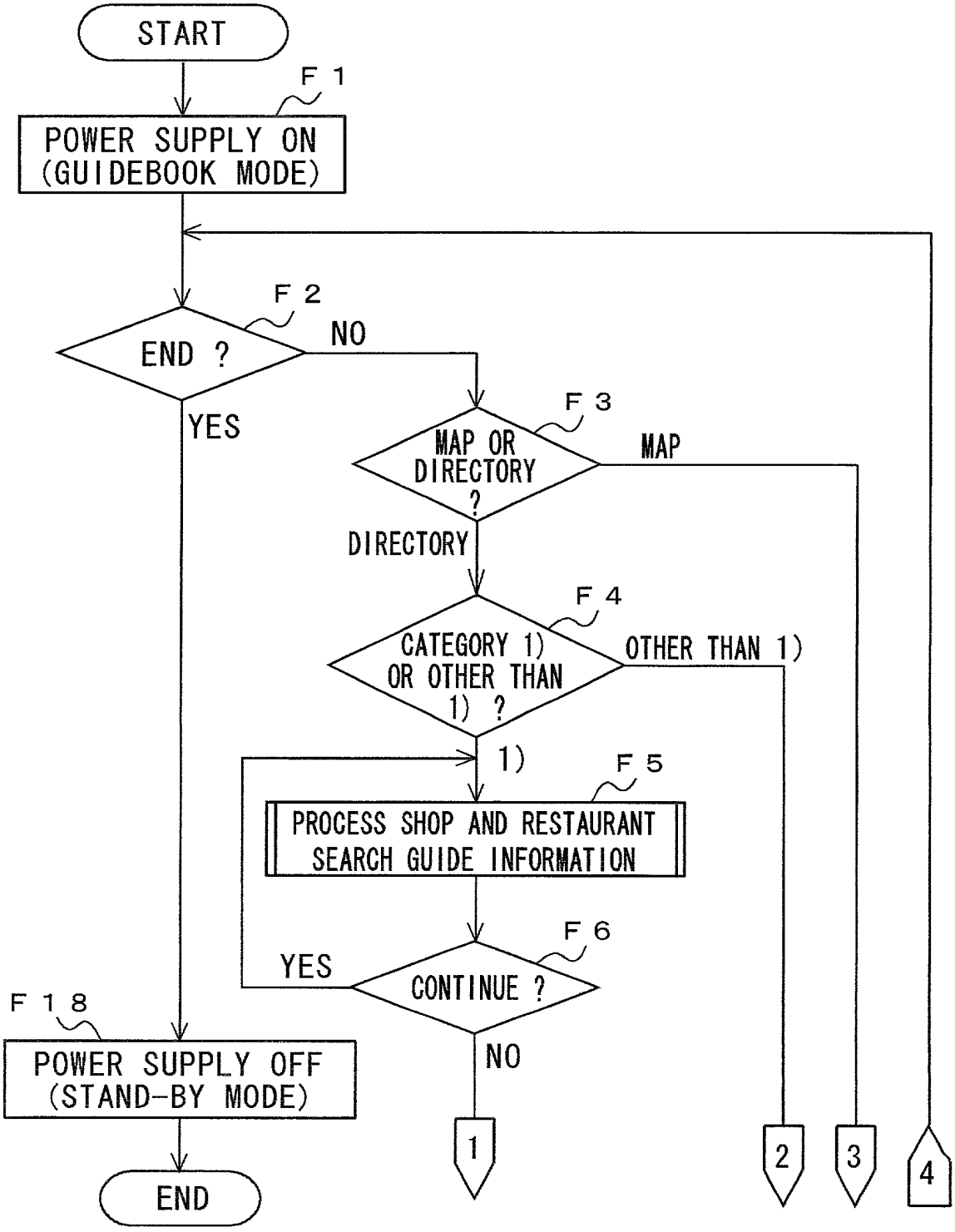
START
F 1
POWER SUPPLY ON (GUIDEBOOK MODE)
F 2
END ?
NO
YES
F 3
MAP OR DIRECTORY ?
MAP
DIRECTORY
F 4
CATEGORY 1) OR OTHER THAN 1) ?
OTHER THAN 1)
1)
F 5
PROCESS SHOP AND RESTAURANT SEARCH GUIDE INFORMATION
F 6
CONTINUE ?
YES
NO
F 18
POWER SUPPLY OFF (STAND-BY MODE)
END
1
2
3
4

FIG. 10B

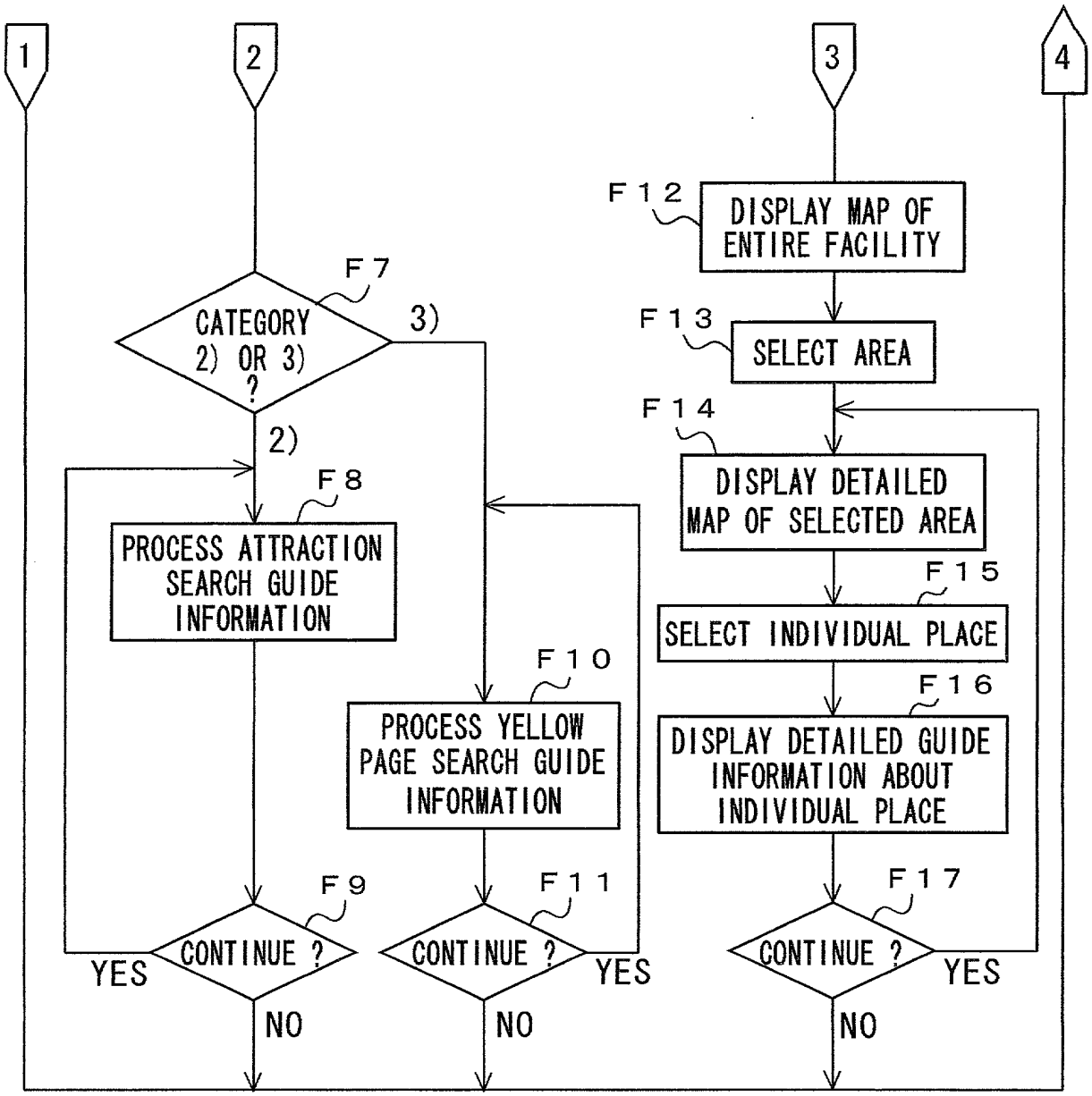

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FIG. 11

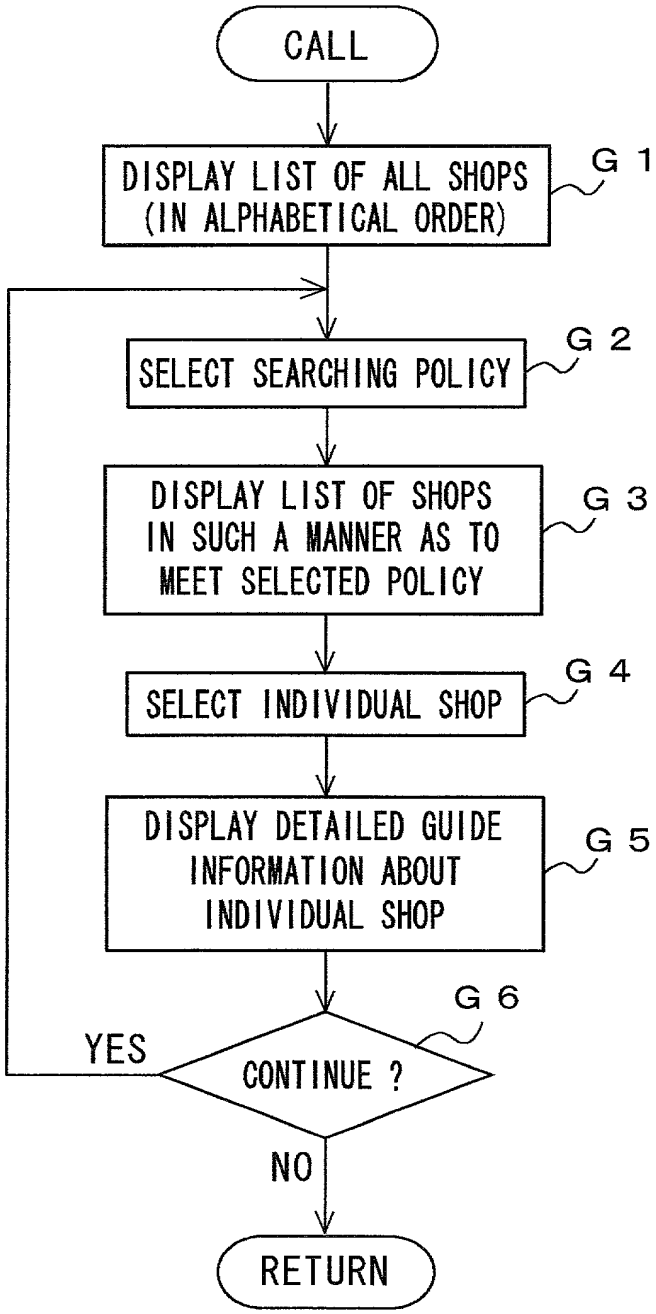

CALL
DISPLAY LIST OF ALL SHOPS (IN ALPHABETICAL ORDER)
G 1
SELECT SEARCHING POLICY
G 2
DISPLAY LIST OF SHOPS IN SUCH A MANNER AS TO MEET SELECTED POLICY
G 3
SELECT INDIVIDUAL SHOP
G 4
DISPLAY DETAILED GUIDE INFORMATION ABOUT INDIVIDUAL SHOP
G 5
G 6
YES
CONTINUE ?
NO
RETURN

FIG. 12

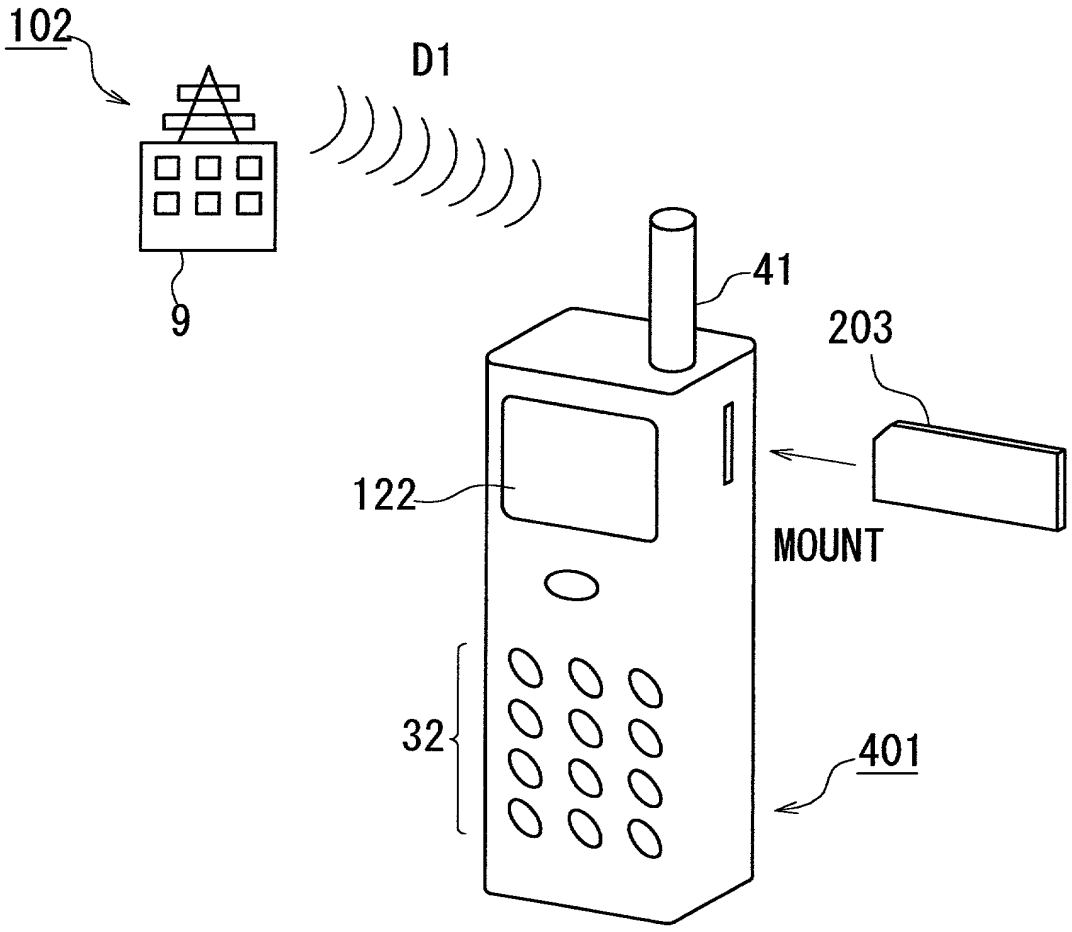


FIG. 13

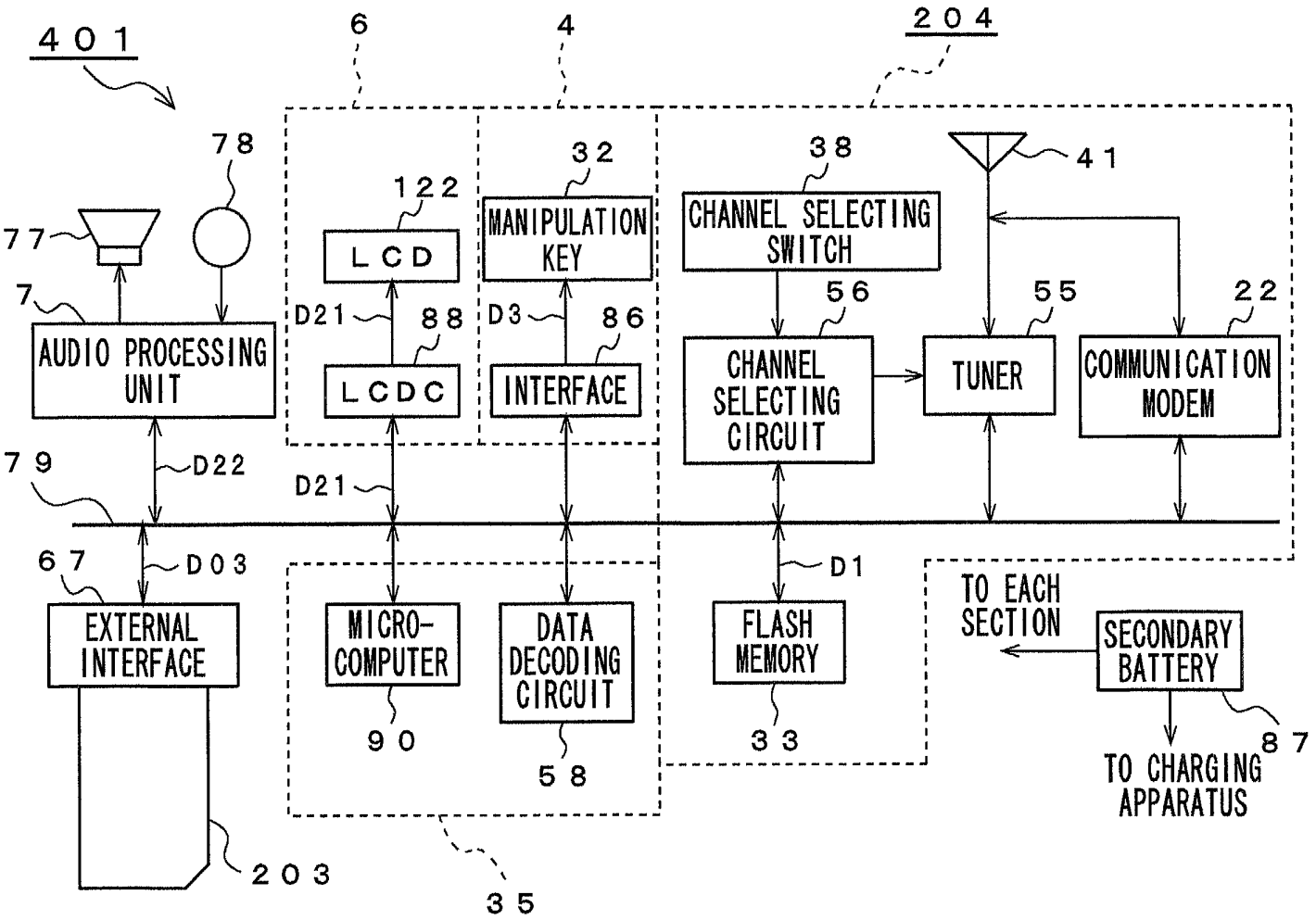

401
6
4
204
78
77
7
AUDIO PROCESSING UNIT
122
LCD
D21
88
LCDC
32
MANIPULATION KEY
D3
86
INTERFACE
38
CHANNEL SELECTING SWITCH
56
CHANNEL SELECTING CIRCUIT
41
55
TUNER
22
COMMUNICATION MODEM
79
D22
D21
67
D03
EXTERNAL INTERFACE
MICRO-COMPUTER
90
DATA DECODING CIRCUIT
58
D1
FLASH MEMORY
33
TO EACH SECTION
SECONDARY BATTERY
87
TO CHARGING APPARATUS
203
35

FIG. 14

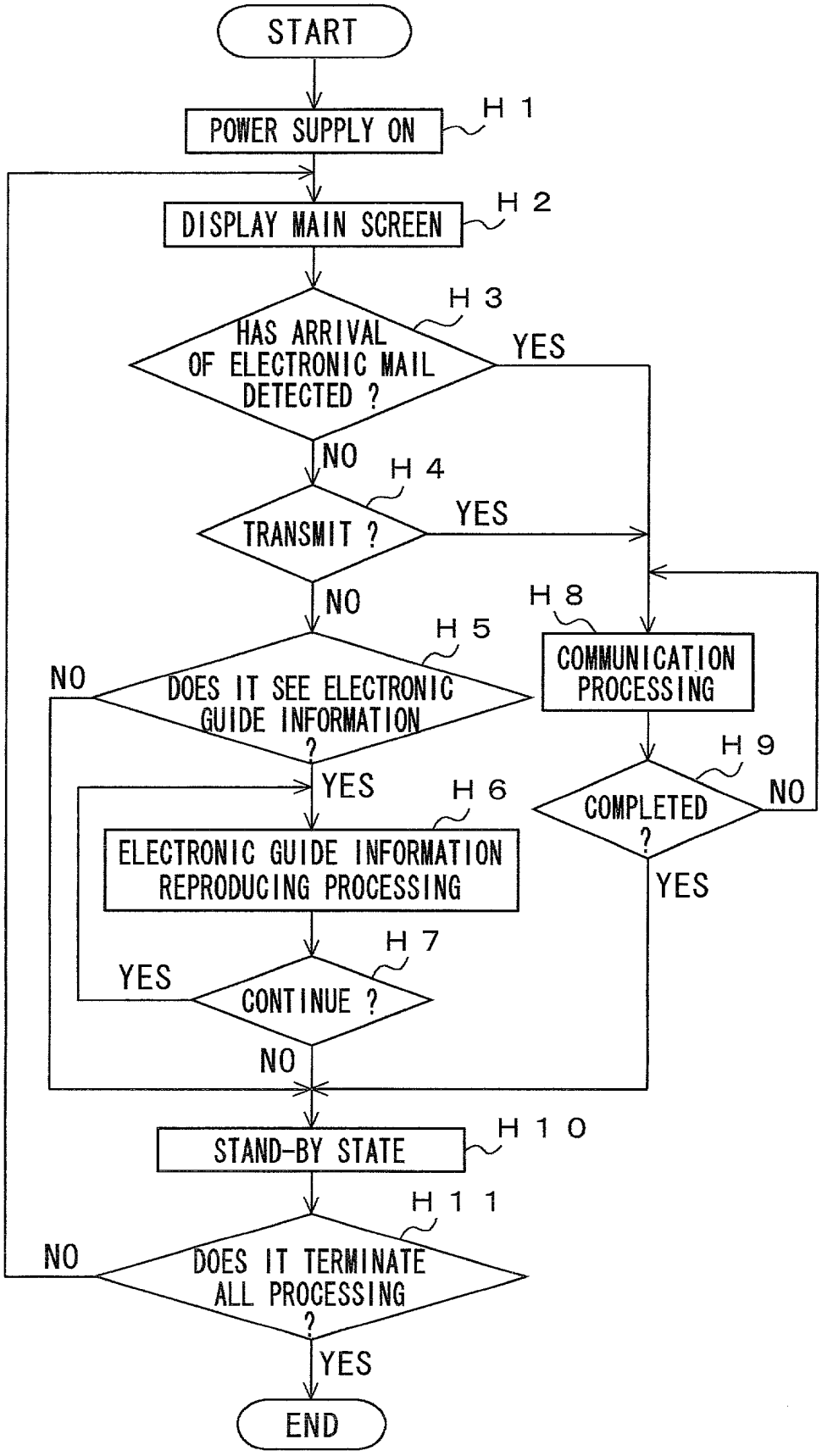

START
POWER SUPPLY ON
H 1
DISPLAY MAIN SCREEN
H 2
HAS ARRIVAL OF ELECTRONIC MAIL DETECTED ?
H 3
YES
NO
TRANSMIT ?
H 4
YES
NO
DOES IT SEE ELECTRONIC GUIDE INFORMATION ?
H 5
NO
YES
ELECTRONIC GUIDE INFORMATION REPRODUCING PROCESSING
H 6
CONTINUE ?
H 7
YES
NO
COMMUNICATION PROCESSING
H 8
COMPLETED ?
H 9
NO
YES
STAND-BY STATE
H 10
DOES IT TERMINATE ALL PROCESSING ?
H 11
NO
YES
END

FIG. 15

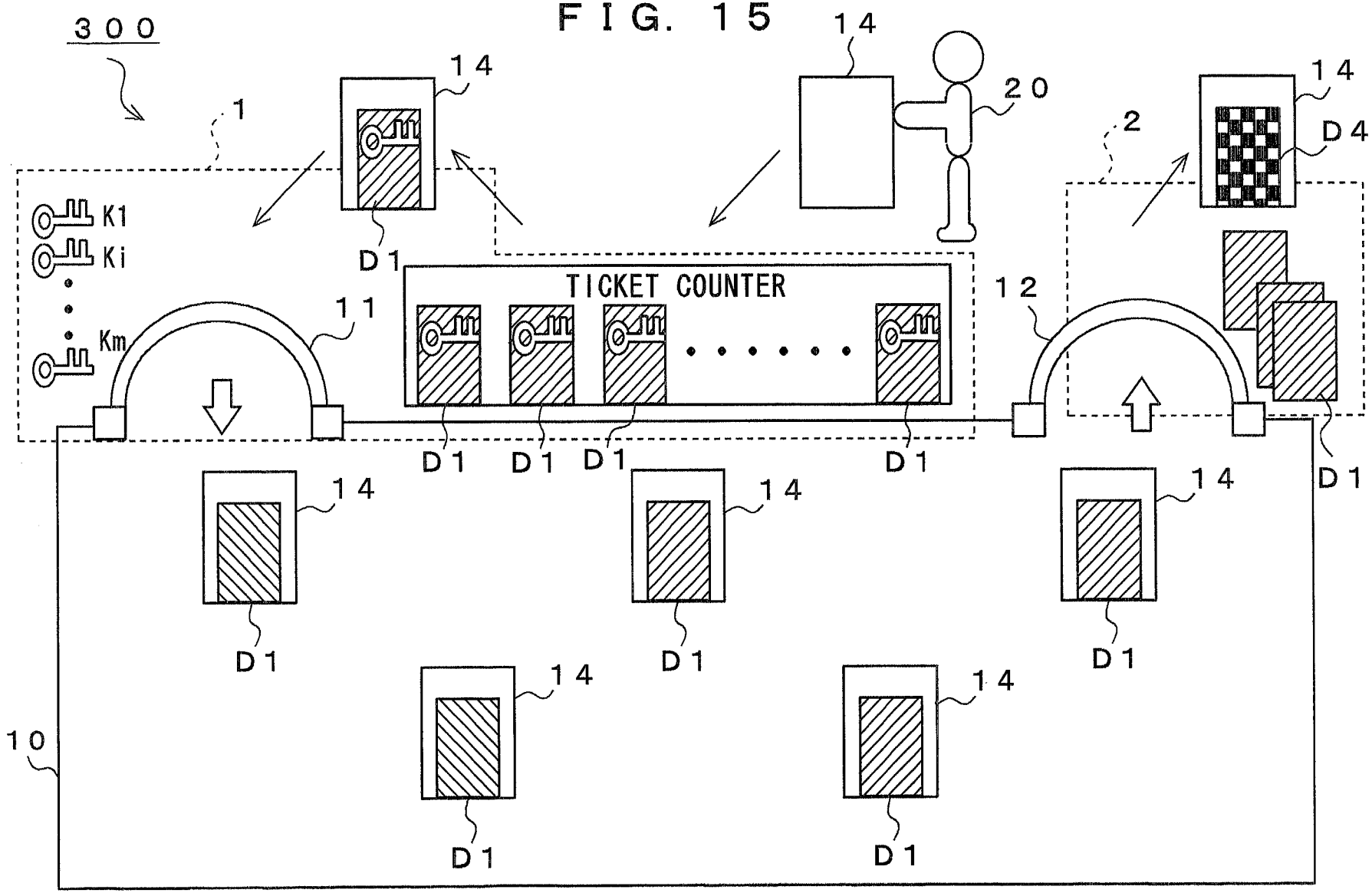


FIG. 16

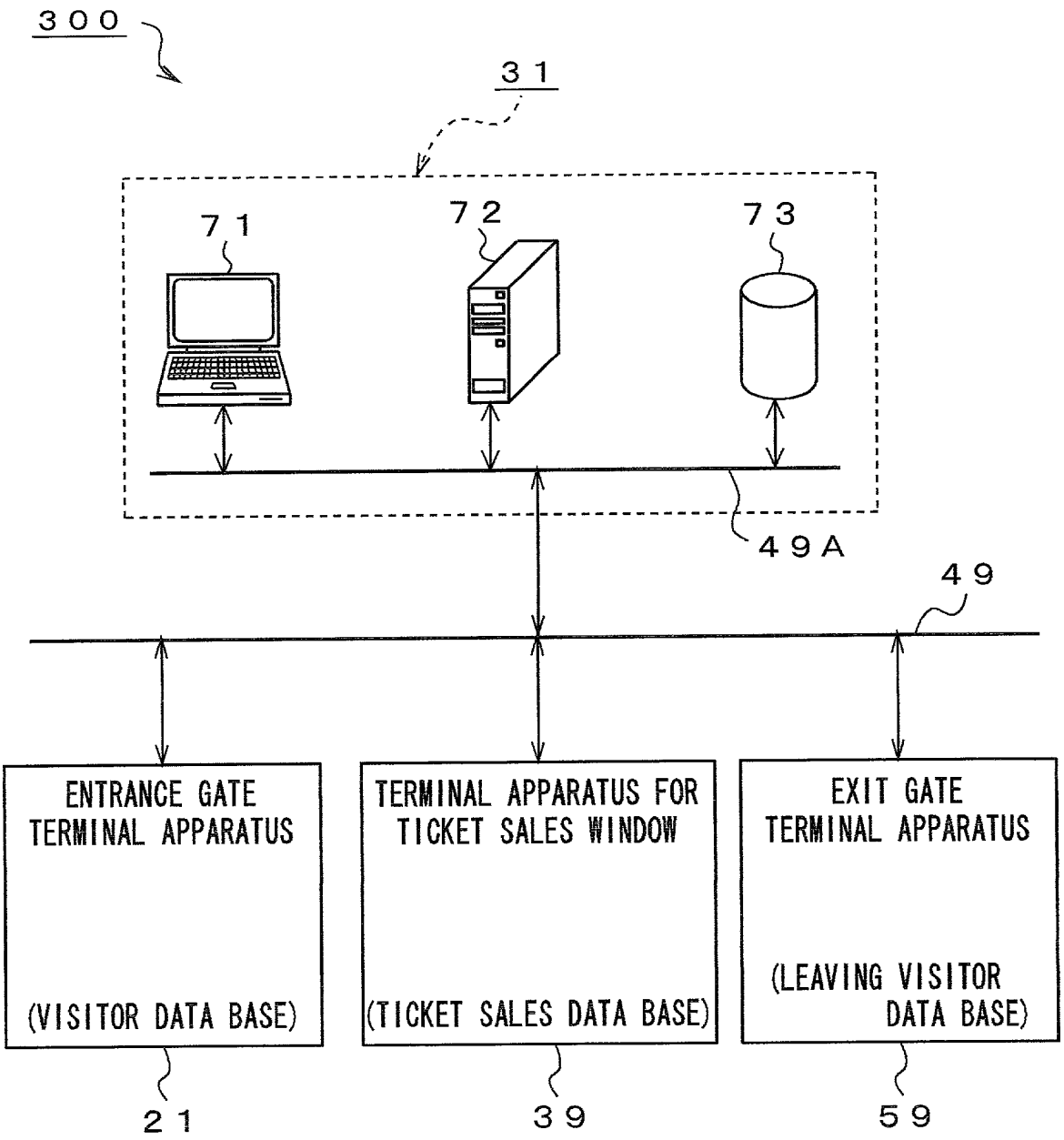

300
31
71
72
73
49A
49
ENTRANCE GATE TERMINAL APPARATUS
(VISITOR DATA BASE)
TERMINAL APPARATUS FOR TICKET SALES WINDOW
(TICKET SALES DATA BASE)
EXIT GATE TERMINAL APPARATUS
(LEAVING VISITOR DATA BASE)
21
39
59

FIG. 17

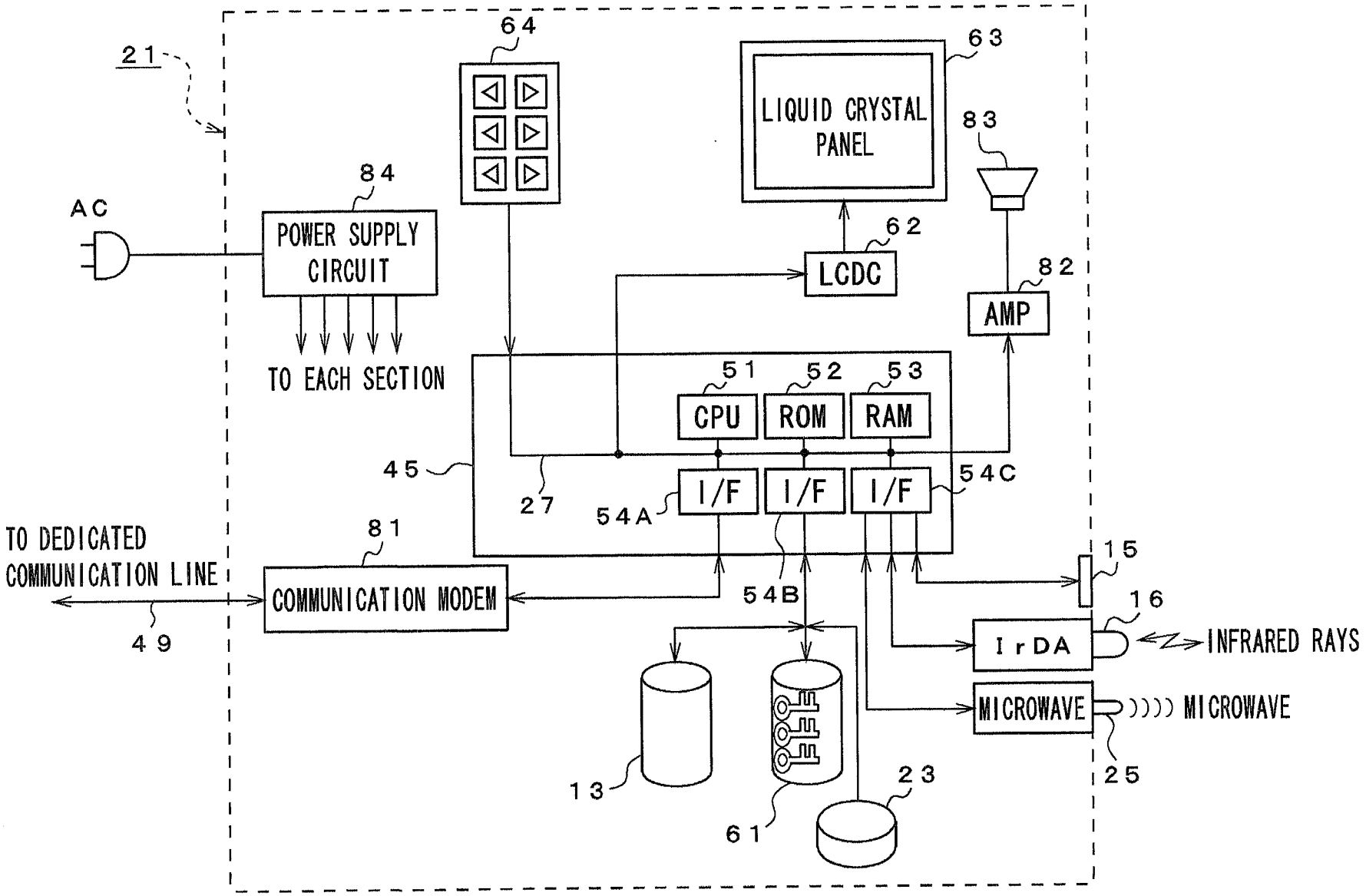

21
64
63
LIQUID CRYSTAL PANEL
83
84
AC
POWER SUPPLY CIRCUIT
62
LCDC
82
AMP
TO EACH SECTION
51
52
53
CPU
ROM
RAM
45
27
54A
I/F
I/F
I/F
54C
TO DEDICATED COMMUNICATION LINE
81
COMMUNICATION MODEM
54B
15
16
IrDA
INFRARED RAYS
MICROWAVE
MICROWAVE
25
49
13
61
23

FIG. 18

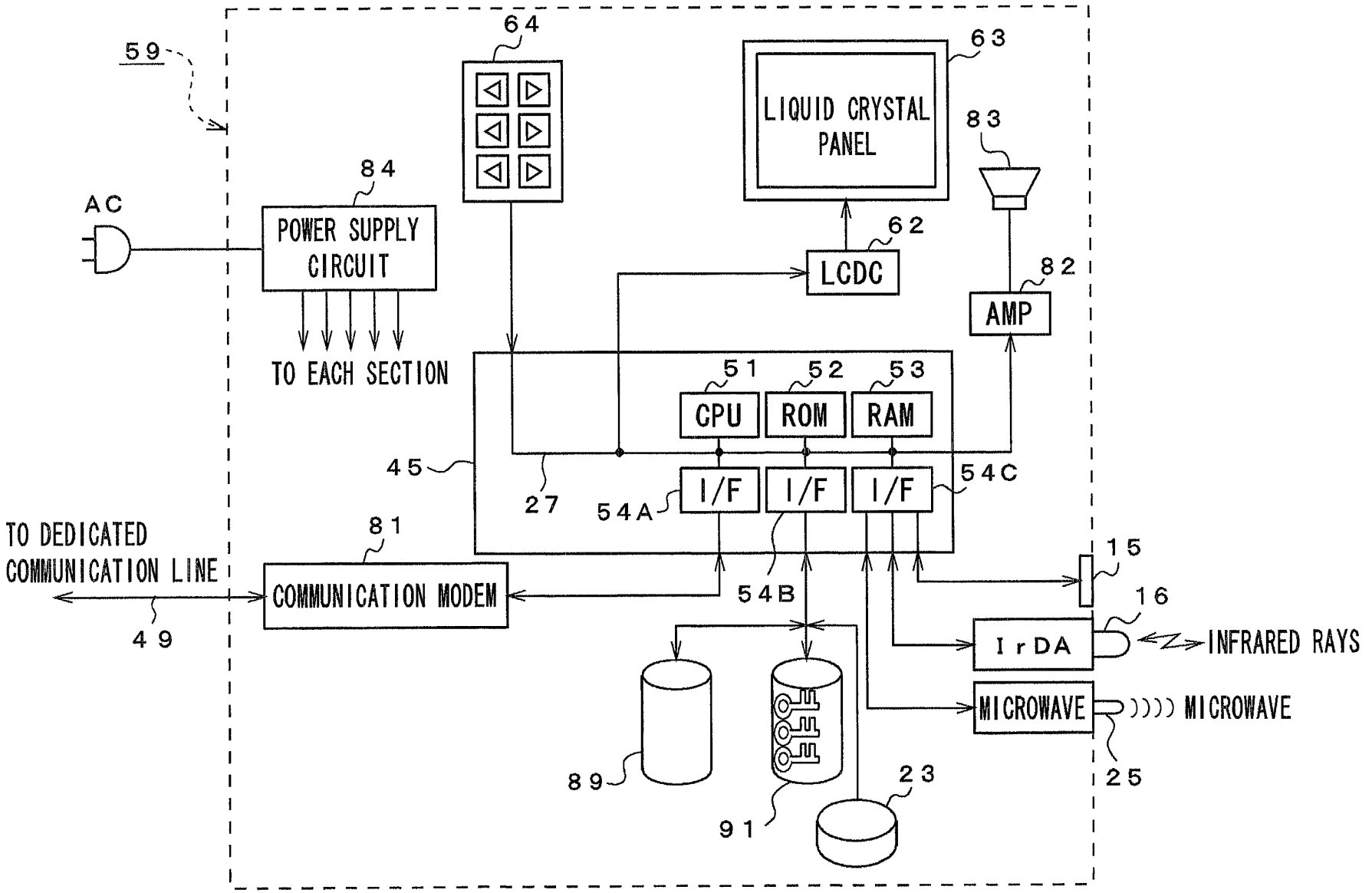

59
64
63
LIQUID CRYSTAL PANEL
83
84
AC
POWER SUPPLY CIRCUIT
62
LCDC
82
AMP
TO EACH SECTION
51
52
53
CPU
ROM
RAM
45
27
54A
I/F
I/F
I/F
54C
TO DEDICATED COMMUNICATION LINE
81
COMMUNICATION MODEM
54B
15
16
IrDA
INFRARED RAYS
MICROWAVE
MICROWAVE
49
89
91
23
25

FIG. 19

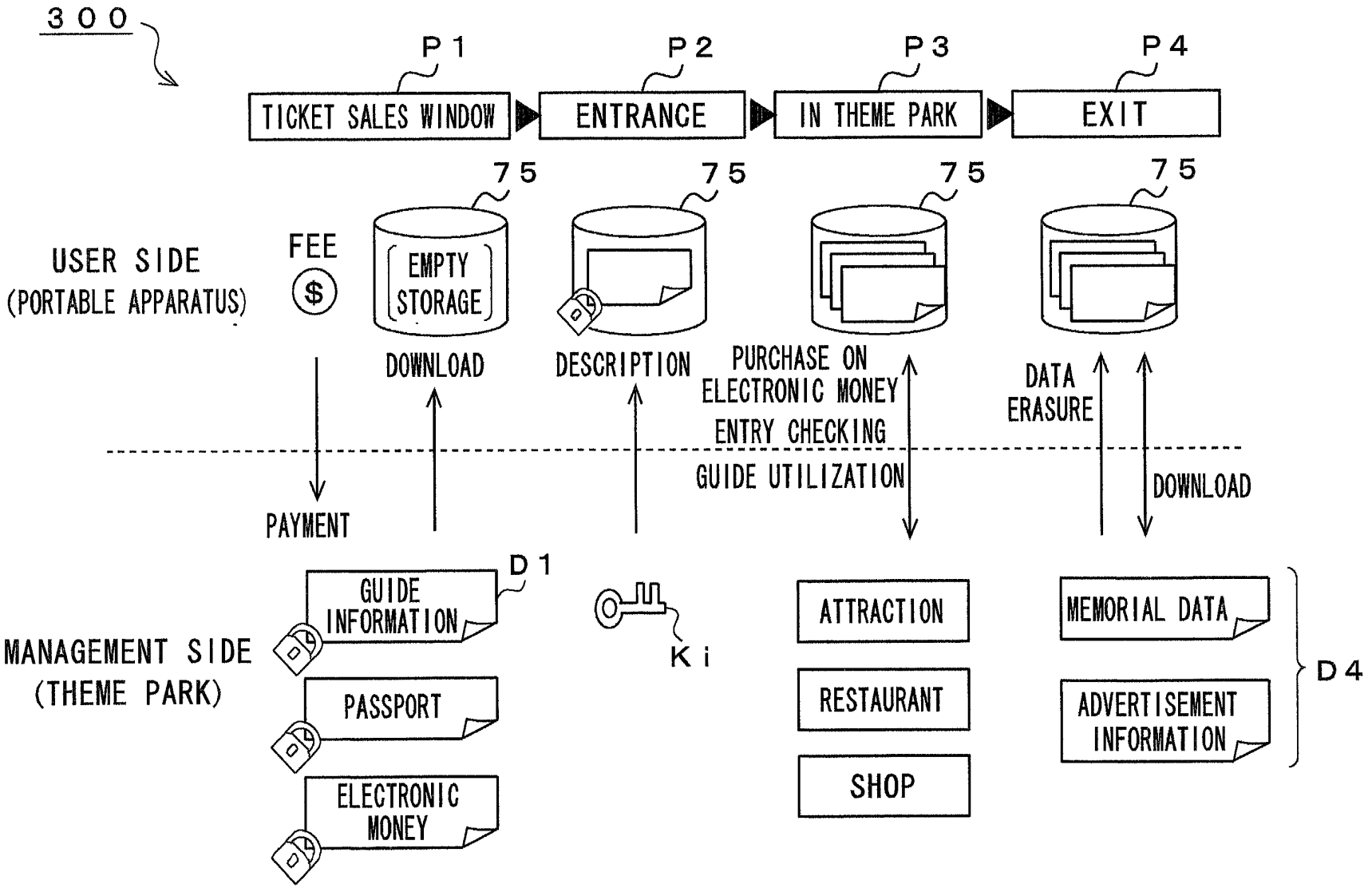

300
P1
P2
P3
P4
TICKET SALES WINDOW
ENTRANCE
IN THEME PARK
EXIT
75
75
75
75
USER SIDE
(PORTABLE APPARATUS)
FEE
$
EMPTY STORAGE
DOWNLOAD
DESCRIPTION
PURCHASE ON ELECTRONIC MONEY
ENTRY CHECKING
GUIDE UTILIZATION
DATA ERASURE
DOWNLOAD
PAYMENT
D1
GUIDE INFORMATION
PASSPORT
ELECTRONIC MONEY
MANAGEMENT SIDE
(THEME PARK)
Ki
ATTRACTION
RESTAURANT
SHOP
MEMORIAL DATA
ADVERTISEMENT INFORMATION
D4

FIG. 20

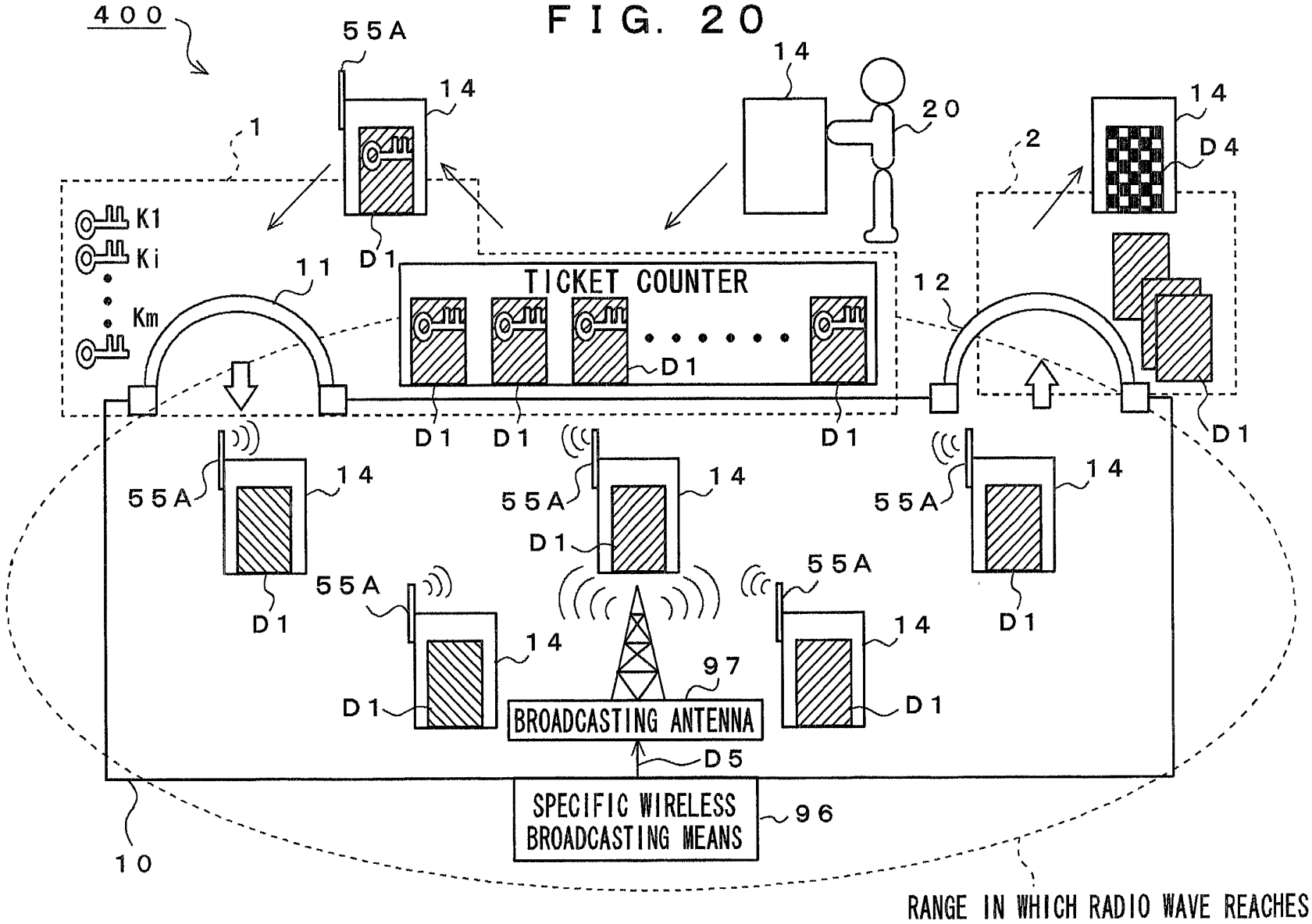

400
55A
14
1
D1
14
20
14
D4
2
K1
Ki
Km
11
TICKET COUNTER
12
D1
D1
D1
D1
55A
14
55A
14
55A
14
D1
D1
55A
55A
14
14
97
D1
D1
BROADCASTING ANTENNA
D5
SPECIFIC WIRELESS BROADCASTING MEANS
96
10
RANGE IN WHICH RADIO WAVE REACHES

FIG. 21

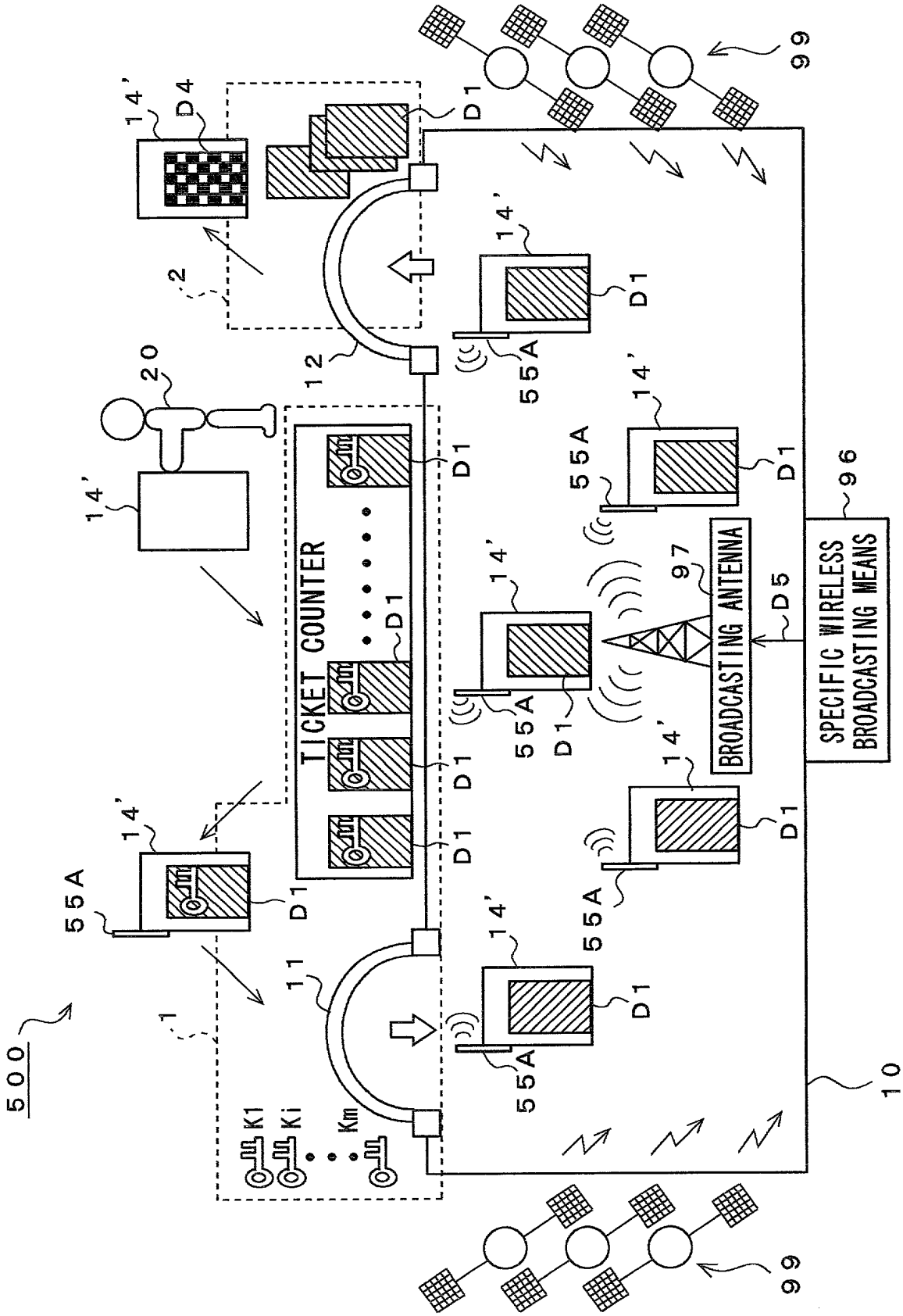
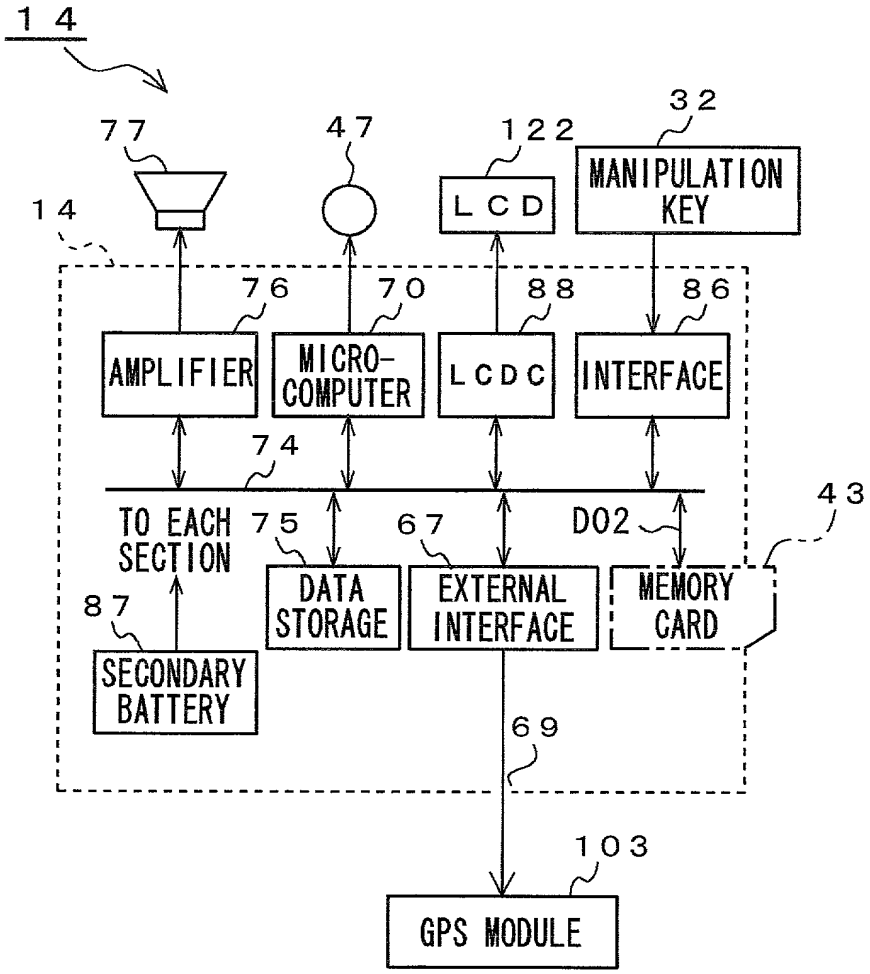

500
10
99
99
1
2
11
12
14'
D4
D1
55A
20
TICKET COUNTER
K1
Ki
Km
BROADCASTING ANTENNA
97
D5
SPECIFIC WIRELESS BROADCASTING MEANS
96

FIG. 22


14
77
47
122
32
LCD
MANIPULATION KEY
14
76
70
88
86
AMPLIFIER
MICRO-COMPUTER
LCDC
INTERFACE
74
TO EACH SECTION
75
67
D02
43
87
DATA STORAGE
EXTERNAL INTERFACE
MEMORY CARD
SECONDARY BATTERY
69
103
GPS MODULE